

THREE-DAY WIND FORECAST FOR YUMA AND VICINITY

ISSUED: FRI SEP 17, 2004 VALID: SAT-MON, SEP 18-20, 2004

<u>WEATHER SYNOPSIS</u>: A trough of low pressure in the Pacific Northwest is digging south and will influence Arizona this weekend. Hurricane Javier south of the area, by Baja, is moving north and weakening, but its moisture will be pulled into the state Saturday through Monday. The Yuma forecast area has a 40% chance of showers and storms Saturday, and a 30% chance on Sunday with south and southwest winds, respectively. Remember, blowing dust is a distinct possibility with thunderstorms in the vicinity. –J.Paul

NOTE: During active summer monsoon episodes, thunderstorms in the vicinity may cause periods of strong shifting winds and dense blowing dust.

Forecast winds for Saturday, September 18: South winds 10-20mph, with a 40% chance of rain.

Forecast winds for Sunday, September 19: South winds 15-25mph, with a 30% chance of rain.

Forecast winds for Monday, September 20: Southwest winds 10-20mph.

Actual sustained winds on Thursday, September 16 were mostly between 5-10 mph from the southwest.

*From data recorded at MCAS, Yuma

PM-10 & PM-2.5 (PARTICLES)

<u>Description</u> – The term "particulate matter" (PM) includes both solid particles and liquid droplets found in air. Many manmade and natural sources emit PM directly or emit other pollutants that react in the atmosphere to form PM. Particles less than 10 micrometers in diameter tend to pose the greatest health concern because they can be inhaled into and accumulate in the respiratory system. Particles less than 2.5 micrometers in diameter are referred to as "fine" particles and are responsible for many visibility degradations (brown cloud). Particles with diameters between 2.5 and 10 micrometers are referred to as "coarse".

<u>Sources</u> – Fine = All types of combustion (motor vehicles, power plants, wood burning, etc.) and some industrial processes. Coarse = crushing or grinding operations and dust from paved or unpaved roads.

<u>Potential health impacts</u> – PM can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases, such as asthma and chronic bronchitis.

<u>Units of measurement</u> – Micrograms per cubic meter (µg/m3)

Averaging interval – 24 hours (midnight to midnight).

<u>Reduction tips</u> – Stabilize loose soils, minimize travel on dirt roads, limit use of leaf blowers, utilize tarps on haul trucks, and on high-wind days reduce outdoor activities.

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